A B S T R A C T

SYSTEM AND METHOD FOR PERSONALIZATION OF SMART CARDS

The present invention discloses a system and method for
personalization of smart cards by using virtual smart cards
(VSC) containing all data objects (card holder specific data
objects) required to personalize real smart cards. The VSC is
a software implemented version of a real smart card providing
the equivalent functionality of a real smart card. The VSC is
generated and used by a VSC control program handling the
generation, the security and the read/write process of the
VSC.

VSCs being generated by the VSC control program having a
logical file structure comprising a public area, a private
area, a secure key area, password area, and an unique
identifier area. The data objects contained in the public area
having no access restrictions, data objects placed into the
private area are encrypted and can be accessed by using a
password, and the data objects placed into secret key area are
encrypted and only accessible by the VSC control program. Each
VSC may be addressed by unique identifier (ID). Card holder
specific data objects being preferably stored in the same

format on a storage media, e.g. database, are transferred into the assigned area of the defined file structure of the VSC by using the VSC control program (personalized VSC). Thus, the personalized VSC as well as their assigned ID and passwords are accessible by the personalization side considering that the access of the IDs and the password is accomplished via a secure channel. At the personalization side, already pre-initialized real smart cards having the same defined logical file structure as their assigned VSCs are personalized by a personalization program reading the data objects of the VSCs and using smart card specific commands for writing the data objects into the EEPROM of the real smart card. An main advantage of the present invention is that the personalization data contained in the VSC may be tested in the application environment before a personalized real smart card is already available. Changes to the data objects set can be done without amending the personalization program. (Fig. 4)